BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Diploma in Horticulture Pearson BTEC International Level 3 Extended Diploma in Horticulture
Unit number and title	Unit 40 Zoological Horticulture
Learning aim(s)	**A:** Investigate the relationship between plants, animals and environmental factors in zoological exhibits **B:** Produce a planting design to create a suitable environment for a zoological exhibit
Assignment title	**Planting design and evaluation**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You are working as a specialist horticulturalist in a zoological garden. Part of your role is to work on suitable planting for the zoological enclosures and for around the visitor areas. You have specific technical skills that have been called upon to assist in the design of a new animal exhibit, and a planting plan is needed for inside and around the immediate area.
Task 1	Learners are required to individually produce a planting design for a zoological exhibit. All plans should be to scale. The design must focus on one of the following types of enclosure: ***arid, temperate forest, tropical forest, rainforest, arboreal, boreal, shrubland, wetland, meadow, savannah or grassland.*** The design will cover an enclosure using a mixture of plant species. You should ensure you planting plan includes: • Plant stress, avoidance and defence • Plant poisons and chemical defence linked to exhibited animals • Toxic species and their characteristics • Planting considerations • Amenity and exhibit landscaping • Plant materials for exhibits and exhibit enrichment. The design should include annotations such as labelling and keys and include an evaluation of • The effectiveness of the planting scheme linked to the zoological exhibit • the impact of plant toxicity in zoological exhibits. You should name the environment you have chosen, and a detailed and justified list of plant species selected, along with the animal species inhabiting the exhibit.
Checklist of evidence required	An annotated planting plan/design and evaluation.

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
A.D1	Evaluate the impact of plant toxicity on animals in a zoological exhibit
A.M1	Analyse the nature of common plant toxins and how they impact on animals in a zoological exhibit.

A.P1	Explain the significance of plant stress, avoidance mechanisms and defence strategies in plants used in zoological exhibits.
A.P2	Explain the nature and effects of plant toxicity, in different species of common plants, on animals in a zoological exhibit
B.D2	Produce a comprehensive planting design for a complex zoological exhibit, evaluating the suitability of own planting design.
B.M3	Analyse the suitability of own planting design for a complex zoological
B.M2	Produce a detailed planting design for a complex zoological exhibit.
B.P4	Explain the suitability of own zoological design.
B.P3	Produce a planting design for a basic zoological exhibit.
Sources of information to support you with this Assignment	**Books** Baratay, E. (2003). *Zoo: a History of Zoological Gardens in the West*. London: Reaktion Books. ISBN-13: 978-1861892089. Midmore, D.J (2015). *Principles of Tropical Horticulture*. Marlborough: CABI Publishing. ISBN-13: 978-1845935153. Dauncey, E. (2018). *Plants That Kill*. Princeton: Princeton University Press. ISBN-13: 978-0691178769. Mello, F.P. (1997). *Handbook of Plant and Fungal Toxicants (Pharmacology & Toxicology)*. London: CRC Press. ISBN-13: 978-0849385513. Meuser, N. (2019). *Zoo Buildings. Construction and Design Manual*. London: DOM Publishers. ISBN-13: 978-3869226804. **Journals/Magazines** Hortweek (hortweek.com) **Websites** Association of Zoological Horticulture; azh.org zsl.org